

(095–096) Proposals to amend Art. 53 *Ex. 9 & *Ex. 10Wen-Bin Yu,^{1,2} Hong Wang¹ & De-Zhu Li¹¹ Key Laboratory of Biodiversity and Biogeography, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650204, People's Republic of China² Graduate University of Chinese Academy of Sciences, Beijing, 100039, People's Republic of China

Authors for correspondence: Hong Wang, wanghong@mail.kib.ac.cn; De-Zhu Li, dzl@mail.kib.ac.cn

(095) Add the following text to Art. 53 voted Ex. 9:*“thibeticus (-a -um) and tibeticus (-a -um), thibetensis and tibetensis, thibetanus and tibetanus.”***(096) Add the following text to Art. 53 voted Ex. 10:***“Astragalus tibetanus Benth. ex Bunge (1868) and A. tibeticola Podlech & L. R. Xu (2004); Berberis thibetica C. K. Schneid. (1909) and B. tibetensis Lafr. (1997).”***Explanation**

Historically, the word ‘Tibet’ applied to a plateau region in south-central Asia between the Himalaya and Kunlun mountains, mostly in the modern Xizang Autonomous Region of China but extending into Xinjiang Uygur, Qinghai, and Sichuan, where it is also named as the Qingzang Plateau. An alternative spelling is ‘Thibet’ and this is found in some publications, particularly older ones. As there is no established Latinization of ‘Tibet’ (or ‘Thibet’), adjectival epithets derived from the geographical names ‘Tibet’ and ‘Thibet’ have been formed in several different ways, e.g., the form *tibetica* or *thibetica*, *tibeticum* or *thibeticum*, and *tibeticus*, the form *tibetensis* or *thibetensis*, the form *tibetanum* or *thibetanum*, *tibetanus* or *thibetanus*, and *tibetana*, and the form *tibeticum*. In addition the substantive *tibeticola* (growing in Tibet) has also been used as an epithet. Based on databases of IPNI (<http://www.ipni.org/index.html>) and TROPICOS (<http://www.tropicos.org/Home.aspx>), over 400 such epithets are known to have been used to name the native plants from this area by many Chinese and western botanists. Of these about 360 records are at species rank and about 40 records at infraspecific ranks.

We are confused that in some cases the same form of epithet derived from ‘Tibet’ and ‘Thibet’ exists in a single genus (e.g., *Rubus thibetanus* Franch. and *R. tibetanus* Focke, *Saussurea thibetica* Franch. and *S. tibetica* C. Winkl, and *Spiraea thibetica* Bur. & Franch. and *Sp. tibetica* T. Yu & L.T. Lu). We believe that this is quite confusing for Asian (and other) botanists (e.g., Lu in Acta Phytotax. Sin. 38: 276. 2000). Therefore, we propose to add the sets of derivative epithets from ‘Tibet’ or ‘Thibet’ to Art. 53.3 Ex. 9 in accordance with the Code’s Art. 53.3.

Additionally, we find that different forms of epithets derived from ‘Tibet’ and/or ‘Thibet’ are sometimes used in the same genus (e.g., *Astragalus tibetanus* Benth. ex Bunge and *A. tibeticola* Podlech & L. Xu, *Berberis thibetica* C.K. Schneid. and *B. tibetensis* Lafr., and *Poa thibeticola* Bor. and *P. tibetica* Munro ex Stapf.), but these pairs have a clearly different spelling, and pronunciation and somewhat different Latin derivation. Therefore, we propose to add related pairs with differently formed epithets derived from ‘Tibet’ and/or ‘Thibet’ to Article 53.3 Ex. 10. However, we propose that the use of the different form of ‘Tibet’ and/or ‘Thibet’ to designate two different species within the same genus should be avoided in the future in accordance with the Code’s Recommendation 23A.2.

Acknowledgements

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(097) Proposal to revise Art. 60 Ex. 21 and add a new ExampleRichard K. Rabeler¹ & Kanchi N. Gandhi²¹ University of Michigan Herbarium, 3600 Varsity Drive, Ann Arbor, Michigan, 48108-2228, U.S.A.² Harvard University Herbaria, 22 Divinity Avenue, Cambridge, Massachusetts, 02138, U.S.A.

Author for correspondence: Richard K. Rabeler, rabeler@umich.edu

Under Art. 60.9 of the *Code* (McNeill & al. in Regnum Veg. 146. 2006), concerning hyphenation of compound epithets, the wording of Ex. 21 (“Hyphen to be maintained: ...”) may be misleading. Regarding the usage of a compound epithet consisting of two or more words, Art. 23.1 permits an established practice, as quoted here: “If an epithet consists of two or more words, these are to be united or hyphenated. An epithet not so joined when originally published is not to be rejected but, when used, is to be united or hyphenated, as specified in Art. 60.9.”

Article 60.9 states that “the use of a hyphen in a compound epithet is treated as an error to be corrected by deletion of the hyphen, unless the epithet is formed of words that usually stand independently or the letters before and after the hyphen are the same, when a hyphen is permitted (see Arts. 23.1 and 23.3)”. Two examples are presented, Ex. 20 dealing with “Hyphen to be omitted”, and Ex. 21 “Hyphen to be maintained.” This implies that an Example, consistent with Art. 23.1 where the words of the epithets “are to be united” and a hyphen needs to be inserted, is wanting.

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Article 60.9 states that “the use of a hyphen in a compound epithet is treated as an error to be corrected by deletion of the hyphen, unless the epithet is formed of words that usually stand independently or the letters before and after the hyphen are the same, when a hyphen is permitted (see Arts. 23.1 and 23.3)”. Two examples are presented, Ex. 20 dealing with “Hyphen to be omitted”, and Ex. 21 “Hyphen to be maintained.” This implies that an Example, consistent with Art. 23.1 where the words of the epithets “are to be united” and a hyphen needs to be inserted, is wanting.

In reality, three of the four examples in Ex. 21 (viz., *Aster novae-angliae* L., *Veronica anagallis-aquatica* L., and *Arctostaphylos uva-ursi* (L.) Spreng.) were published with unhyphenated two-word epithets. Linnaeus published “*Aster novae angliae*” (Sp. Pl.: 875. 1753), “*Veronica anagall. ∇*” (l.c.: 12; the symbol ∇ [inverted delta sign] must be transcribed as “*aquatica*” in compliance with Art. 23.3), and “*Arbutus uva ursi*” (l.c.: 395), all three of which we now hyphenate. The fourth example (*Athyrium austro-occidentale* Ching in Acta Bot. Boreal.-Occid. Sin. 6(3): 152. 1986) was, however, published with a hyphen. Since the hyphen was not originally present for three of the listed examples, it is not appropriate to cite the word “maintained”, which instead needs to be replaced with “inserted”. To maintain uniformity between Ex. 20 and Ex. 21, we propose that Ex. 21 be revised with new examples of names originally published with hyphens and a new Example (Ex. 21 bis) be added to include names originally published with unhyphenated two-word epithets:

(097) Revise Art. 60 Ex. 21 and add a new Example:

“Ex. 21. Hyphen to be maintained: *Vitis novae-angliae* Fernald (1917), *Piper pseudo-oblongum* McKown (1928), *Ribes non-scriptum* (Berger) Standl. (1930), *Athyrium austro-occidentale* Ching (1986).”

“Ex. 21 bis. Hyphen to be inserted: *Aster “novae angliae”* L. (1753), *Coix “lacryma jobi”* L. (1753), and *Arctostaphylos “uva ursi”* (L.) Spreng. (1825) become *A. novae-angliae*, *C. lacryma-jobi*, and *A. uva-ursi*, respectively; *Veronica “anagallis ∇”* L. (1753) becomes *V. anagallis-aquatica* (see Art. 23.3); *Vaccinium* sect. “*Vitis idaea*” W.D.J. Koch (1837) becomes *V.* sect. *Vitis-idaea*; *Marattia “rolandi principis”* Rosenst. (1911) becomes *M. rolandii-principis* (see Art. 60.11).”

We believe this amendment would clarify the existing language of Art. 60.9 without changing its intent.

(098–100) Proposals to limit hardcopy publication of Appendices II–V

Scott A. Redhead

National Mycological Herbarium, Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada, C.E.F., Ottawa, Ontario, Canada K1A 0C6; scott.redhead@agr.gc.ca

The *Vienna Code* (McNeill & al. in *Regnum Veg.* 146. 2006) is 175 pages long from the Preamble to the end of Appendix I on names for hybrids (126 pp.), together with the index to scientific names and general subject index (46 pp.) and Appendix VI covering *Opera utique oppressa* (3 pp.). Appendices II–V listing conserved and rejected names and the indices to these span 396 pages, or nearly 70% of the published hardcopy of the *Code*. Publication costs of these appendices surely must be prohibitive. Additionally, because of the costs and burden on editors, there is a reluctance, which I have personally observed over time, to publish proposals for conservation of names or types, or for rejection of names. In this day and age it is more efficient to maintain online databases that are searchable and easily updated. It is generally anticipated that because of radical changes in systematics resulting from molecular analyses and also changes to the *Code* regarding fungal names, that many conservations, rejections, and typifications will be needed to stabilize nomenclature. Therefore, it is here proposed that after hardcopy publication of the *Melbourne Code*, hardcopy records of approved changes to Appendices II–V be published only in *Taxon* following each International Botanical Congress as supplements to the printed *Code*. Additionally, it is proposed that an online free-access updated database be maintained in a suitable institute (or mirror institutes) chosen by the Editorial Committee and well publicized. Periodically, at the discretion of future International Botanical Congresses, a completely new hardcopy listing could be published together with or alongside the *Code* every 20, 30 or more years. Appendices I and VI serve more general functions, and their continued publication with the Articles is deemed to be useful.

(098) Add to the Preamble a new paragraph 12:

“12. Appendices IIA [Nomina familiarum algarum, fungorum, pteridiophytorum, et fossilium conservanda et rejicienda], IIB [Nomina familiarum bryophytorum et spermatophytorum conservanda], III [Nomina generica conservanda et rejicienda], IV [Nomina specifica conservanda et rejicienda] and V [Nomina utique rejicienda] form an integral part of the *Code*, whether published together with, or separately from, the hardcopy bound body of the *Code*. These Appendices may be periodically updated in the journal *Taxon* and may be made available in online databases.”

(099) Add a new paragraph to Article 14:

“14.15. When proposals for conservation or rejection under Art. 56 are approved by the International Botanical Congress, supplementary lists of the additions to Appendices II–V will be published in the journal *Taxon* to coincide with each new edition of the *Code*. The approved listings to each of these appendices will be added to the *International code of botanical nomenclature* online database of conserved and rejected names, maintained by the International Association for Plant Taxonomy as directed by the International Botanical Congress. Periodic publication of comprehensive hardcopy of the appendices may be made.”

(100) Provide approval to the Editorial Committee to adjust the wording of the Code to reflect these changes where necessary.